**Application No.: 10/578,003** 

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Previously Presented) A semiconductor device comprising:
- an insulation film formed on a substrate;
- a buried metal interconnect formed in the insulation film; and
- a barrier metal film formed between the insulation film and the metal interconnect,
- wherein the barrier metal film is a metal oxide film, and

wherein the metal oxide film contains at least one of the elements forming the insulation film and is made of at least one selected from a group consisting of Zr, Hf, W, V, Mo, Os, Rh, Ir, Pd and Pt or any alloy thereof.

- 2-5. (Canceled).
- 6. (Previously Presented) The semiconductor device of claim 1, wherein a metal forming the metal oxide film is a refractory metal.
- 7. (Original) The semiconductor device of claim 1, wherein the metal interconnect is formed of copper or an copper alloy.
  - 8-53. (Cancelled).
- 54. (Previously Presented) The semiconductor device of claim 1, wherein the insulation film is SiO<sub>2</sub>, SiOF<sub>2</sub>, SiOC, SiON, SiOCN, or an organic film containing oxygen.
- 55. (Currently Amended) The semiconductor device of claim 1, wherein the insulation film is nitride, carbide or silicide.